Amendments to the Claims

Please cancel Claims 3 and 9 without prejudice or disclaimer of the subject matter recited therein.

Please amend Claims 1, 5 and 7 to read as follows.

1. (Currently Amended) A battery residual capacity detection method in a printing apparatus operable with at least a battery power source, said method comprising:

a detection step of detecting a battery voltage thereby detecting a battery residual capacity while printing is performed on a printing medium by reciprocate-scanning a printhead mounted on ~~said~~ the printing apparatus;

a determination step of determining whether or not the battery residual capacity detected at said detection step is equal to or less than a predetermined threshold value; and

a detection control step of controlling driving of a carriage motor to reciprocate-scan ~~said~~ the printhead and driving of a conveyance motor to convey the printing medium so as to provide a time zone where a load on the carriage motor and that on the conveyance motor do not overlap in accordance with the determination result at said determination step, and controlling said detection step so as to detect the battery residual capacity in the time zone where the loads do not overlap.

wherein the time zone in which the loads do not overlap includes a time zone after excitation to stop the conveyance motor to stop conveyance of the printing medium and before driving of the carriage motor to move the printhead.

2. (Original) The method according to claim 1, wherein the conveyance motor is a stepping motor.

Claim 3 (Canceled).

4. (Original) The method according to claim 1, wherein said detection control step includes a drive control step of, if it is determined at said determination step that the battery residual capacity is greater than the predetermined threshold value, controlling the driving of the carriage motor and that of the conveyance motor so as to provide a time zone where the carriage motor and the conveyance motor are simultaneously driven, to increase a printing speed.

5. (Currently Amended) The method according to claim 1, wherein ~~said~~ the printing apparatus is also operable with an AC power source.

6. (Original) The method according to claim 1, wherein the printhead is an inkjet printhead.

7. (Currently Amended) A printing apparatus operable with at least a battery power source, comprising:

a carriage motor to generate a driving force to reciprocate-scan a carriage holding a printhead;

a conveyance motor to generate a driving force to convey a printing medium;

detection means for detecting a battery voltage thereby detecting a battery residual capacity while printing is performed by the printhead on the printing medium by reciprocate-scanning of the carriage;

determination means for determining whether or not the battery residual capacity detected by said detection means is equal to or less than a predetermined threshold value; and

detection control means for controlling driving of said carriage motor to reciprocate-scan the printhead and driving of said conveyance motor to convey the printing medium so as to provide a time zone where a load on said carriage motor and that on said conveyance motor do not overlap in accordance with the determination result of said determination means, and controlling said detection means so as to detect the battery residual capacity in the time zone where the loads do not overlap,

wherein the time zone where the loads do not overlap includes a time zone after excitation to stop said conveyance motor to stop conveyance of the printing medium and before driving of said carriage motor to move the printhead.

8. (Original) The apparatus according to claim 7, wherein said conveyance motor is a stepping motor.

Claim 9 (Canceled).

10. (Original) The apparatus according to claim 7, wherein said detection control means includes drive control means for, if it is determined by said determination means that the battery residual capacity is greater than the predetermined threshold value, controlling the driving of said carriage motor and that of said conveyance motor so as to provide a time zone where said carriage motor and said conveyance motor are simultaneously driven, to increase a printing speed.

11. (Original) The apparatus according to claim 7, wherein said printing apparatus is also operable with an AC power source.

12. (Original) The apparatus according to claim 7, wherein the printhead is an inkjet printhead.

13. (Original) The apparatus according to claim 12, wherein the inkjet printhead has an electrothermal transducer to generate thermal energy to be supplied to ink for discharging the ink by utilizing the thermal energy.